Amendments to the Specification

Please change the paragraph at page 8, line 10 – page 8, line 16, as follows:

Figure 2 illustrates, in more detail, communication between the digital base station 30 and the radio link converter unit 32. The digital base station 30 and the radio link converter unit 32 may be co-located on a single platform. Alternatively, the digital base station and the radio link converter unit 32 may be physically separated, such that the radio link converter unit is located in proximity to an antenna 34 and the digital base station ~~36~~ 30 is located in proximity to the MSC 24 or the PDSN 18 of the wireless network. Other arrangements are also possible.

Please change the paragraph at page 11, line 6 – page 11, line 12, as follows:

The digital base station 30 may have a processor and memory. The memory may store computer instructions executable by the processor for receiving from link 36, bearer data for a plurality of channels. The memory may also store computer instructions executable by the processor to define a data frame, such as illustrated by Figure 3. The digital base station 30 may be programmed to insert into the data frame, the control information and the bearer data for the plurality of channels, and output the data frame to the radio control unit ~~30~~ 32 over the link 40.

Please change the paragraph at page 11, line 13 – page 11, line 21, as follows:

A user interface ~~34~~ 10 coupled to the digital base station 30 may facilitate obtaining the control information associated with the bearer data. The user interface ~~34~~ 10 may consist of a keyboard or some other mechanism for allowing a user to input into the ~~memory 72~~ digital base station 30 a modulation frequency at which the analog signal generated by the radio link converter unit 32 is to be modulated and a power level at which a channel is to be modulated. Also, the user may be able to input a spreading sequence for a channel, and/or a PN offset for a

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cell. The digital base station 30 may use the control information obtained by the user interface ~~34~~ 10 to define the frame sent to the radio link converter unit 32. Other arrangements are also possible.

Please change the paragraph at page 12, line 3 – page 12, line 13, as follows:

The receiver 48 may receive the control information and the bearer data from link 40. The receiver 48 may send the bearer data and the control information to the parsing unit 50. The parsing unit 50 may extract, from the data frame sent by the digital base station 30, the bearer data for a particular channel and the control information for the particular channel. The control information may define the power level for the particular channel of bearer data, the modulation frequency for the particular channel of bearer data, the spreading sequence for the particular channel, and the PN offset. Then, the parsing unit ~~52~~ 50 may send the bearer data for the particular channel to the spreading unit 32, the power level for the particular channel to the power control unit 56, the modulation frequency for the particular channel to the modulator 68, the spreading sequence for the particular channel to the spreading unit 52, and the PN offset to the PN offset unit 54.

Please change the paragraph at page 12, line 21 – page 13, line 2, as follows:

The spreading sequence that is applied to the digital signal for each channel may be the spreading sequence that is extracted from the control information by the parsing unit 50. The spreading unit ~~34~~ 52 may apply the spreading sequence to each channel of the digital signal to produce a plurality of spread spectrum signals.

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Please change the paragraph at page 13, line 13 – page 13, line 18, as follows:

Prior to transmitting the analog signal, the modulator 68 may modulate the analog signal. The analog signal may be modulated at the modulation frequency defined by the control information. For example, the ~~radio frequency unit~~ modulator 68 may produce a carrier wave at the modulation frequency defined by the control information. The radio frequency modulator 68 may multiply the carrier wave with the analog signal so as to modulate the particular channel of the analog signal at the modulation frequency.

Please change the paragraph at page 13, line 19 – page 14, line 6, as follows:

Alternatively, the analog signal may be modulated as two or more steps. The modulation frequency may be known as an intermediate frequency (IF). The modulator 68 may first multiply the analog signal by an intermediate frequency (IF) wave at the modulation frequency. The result of multiplying the analog signal by the IF wave may be to modulate the analog signal at the modulation frequency. Then, the modulator 68 may multiply the analog signal, modulated at the intermediate frequency, by another wave. The other wave may be at a carrier frequency that results in the particular channel of the analog signal being further modulated to a higher frequency. With the analog signal modulated at the carrier frequency, the RF power amplifier ~~70~~ 44 may add a fixed gain to the analog signal. Then, the analog signal may be output to the antenna 34 for transmission to the wireless terminal 12.

Please change the paragraph at page 14, line 12 – page 14, line 14, as follows:

Figure 5 illustrates exemplary digital signal processing and exemplary analog signal processing performed by the processing modules of the radio link converter unit ~~30~~ 32.

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Please change the paragraph at page 15, line 11 – page 15, line 16, as follows:

The digital signal 82 may be passed to the spreading unit 52. The spreading unit 52 may apply the spreading sequence to each channel of the digital signal 82. By applying the spreading sequence to each channel of the digital signal 82, the spreading unit ~~54~~ 52 may produce one or more spread spectrum signals 88. The one or more spread spectrum signals 88 may define, albeit in a spread spectrum form, the bearer data for the one or more channels.

Please change the paragraph at page 15, line 17 – page 16, line 3, as follows:

The spread spectrum signals 88 may then be input into the power control unit 56. The power control unit 56 may have received from the parsing unit ~~52~~ 50 a power level for each channel of bearer data. The power level may be an absolute or differential power level for the channel of bearer data. The power control unit 56 may use the power level to amplify the power of the spread spectrum signal 88 for each channel to the power level. For example, the power control unit 56 may receive from the parsing unit 50 an indication that channel 1 is to be amplified to 10 dBm and channel 2 is to be amplified to 20 dBm. The power control unit 56 may use the indications to amplify the spread spectrum signals 88 to produce the spread spectrum signals 90 with the appropriate power levels. Other arrangements are also possible.

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